

## Identification of a Print Design Approach for the Application of Multicolour and Pattern Changing Effects

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**Abstract :** The main reason for printing coloured imageries, pattern or motif onto textiles is to enhance the visual appearance of the surface so that the final textile product would get the required attention from potential customers. Such colours and patterns are permanently applied onto the textiles using conventional static colourants, and we expect such decorations to be last for the entire lifecycle of the textile product. The focus of this research presentation is to discuss the ability to integrate multicolour and pattern changing aesthetics onto textiles with the application of water based photochromic colourants. By adopting a research through design approach, a number of iterative flatbed screen printing experiments were conducted to explore the process of printing water based photochromic colours on textile surfaces. The research resulted in several technical parameters that have to be considered during the process of screen printing. Moreover, a modified printing technique that could be used to apply decorative photographic imagery onto textile with multicolour changing effects was also identified. A number of product applications for such dynamic printed textiles were revealed, and appropriate visual evidence was referred to justify the finding.

**Keywords :** dynamic aesthetics, multicolour changing textiles, non-emissive colours, printed textile design

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